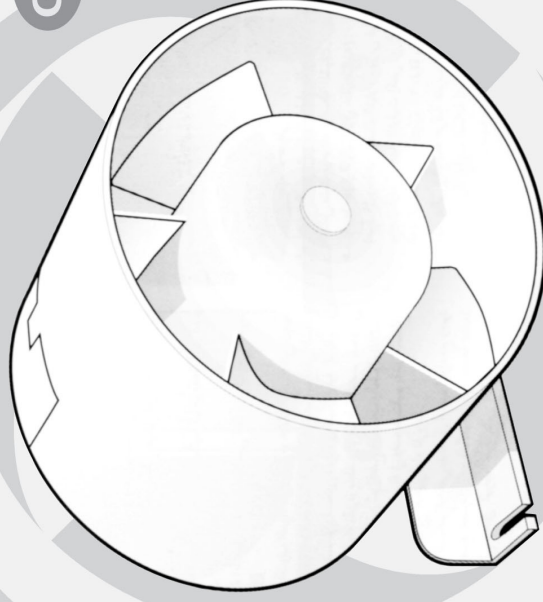


# XIL100 XIL100T *with timer* In-line Axial Fan Kit

## Installation instructions

Retain for future reference

GB F D NL N P I a GR



 Xpelair®

#### Do's and don'ts

- Do read all the instruction leaflet before commencing installation.
- Do install the each fan with a double pole isolating switch.
- Do not mount the fan immediately behind grille if it is likely to be exposed to splashing water.
- If fitting internal grille near to shower, to prevent water splashing into fan it must be fitted above the maximum height of the shower head.
- Do make sure the mains supply is switched off before attempting to make electrical connections or carry out any maintenance or cleaning.

#### Guarantee

##### Customers outside UK - see international below.

- UK: The fan is guaranteed against defects for 3 years from the date of purchase.
- Please keep your purchase receipt.
- If you have any problems, contact Xpelair's Head Office at the address shown below.

#### Technical advice and service

##### Customers outside UK - see international below.

- UK: Xpelair have a comprehensive range of services including:
  - Free technical advice help-desk from Engineers on all aspects of ventilation.
  - Free design service, quotations and site surveys.
  - Service and maintenance contracts to suit all requirements.

##### Please ask for details:

- By telephone on Techline: +44 (0) 8709 000430
- By fax on Techfax: +44 (0) 8709 000530
- At the address below

#### Head Office, UK Sales Office and Spares

Applied Energy Products Ltd, Morley Way, Peterborough, PE2 9JJ England  
Telephone: +44 (0) 1733 456789  
Fax: +44 (0) 1733 310606  
Sales/Spares Hotline: +44 (0) 8709 000420  
Sales/Spares Faxline: +44 (0) 8709 000520  
<http://www.xpelair.co.uk>

#### International

- Guarantee: Contact your local distributor or Xpelair direct for details.
- Technical Advice and Service: Contact your local Xpelair distributor.

 Xpelair



applied energy

CE

FM02118 ISO 9001:2000

Part No. 18470AA  
(Rev C)

# Xpelair In Line Axial Fan installation and operating instructions - XIL100, XIL100T

Please leave this leaflet with the Controller for the benefit of the user.

## Important!

Please read these instructions carefully before attempting installation, and retain for future reference.

- ◆ This appliance is intended for connection to fixed wiring.
  - ◆ Check that the electrical rating shown on the fan matches the mains supply.
  - ◆ This appliance is double insulated and does not require an earth connection.
  - ◆ If metal switch boxes are used, earthing regulations must be followed.
  - ◆ All installations must be supervised by a qualified electrician.
  - ◆ Installations and wiring must conform to current IEE Regulations (UK), local or appropriate regulations (other countries).
  - ◆ When intended for use in possible chemical corrosive atmospheres, you must consult our Technical Services Department.
  - ◆ If you have any queries before installing these products or after they have been installed, call the Xpelair Technical Hotline +44 (0) 8709 000430. Our engineers are there to help you during normal office hours (UK only) and may be faxed at all other times +44 (0) 8709 000630.
- Customers outside the UK should contact their local Xpelair distributor.

## Description

- ◆ Model XIL100 is an In Line Axial Fan designed to extract damp air from your room to the outside and has all the components you need to install either in the loft/ceiling recess or through the wall, see diagrams **A** and **B**.
- ◆ Model XIL100T additionally features an overrun timer adjustable between 2 and 20 minutes.

## Components

- 1 In Line Axial Fan with bracket
- 2 3m flexible 4"/100mm ducting
- 3 In-line back-draught shutter
- 4 White internal fixed louvre grille with 2 x invisible screw covers
- 5 Grey external fixed louvre grille with 2 x invisible screw covers
- 6 6 x wall plugs
- 7 6 x screws
- 8 2 x self-adhesive foam strips for duct connections (if required)

## What you will need

- ◆ A double pole isolating switch with a minimum contact gap of 3mm (wall or ceiling mounted).
- ◆ Suitably rated flexible 2-core cable for XIL100. (Fan to on/off or isolating switch).
- ◆ Suitably rated flexible 3-core cable for XIL100T. (Fan to on/off or isolating switch).
- ◆ Screwdrivers.
- ◆ A ceiling or wall on/off switch with built-in indicator light (if not wiring to existing lighting circuit).
- ◆ Masonry drill, hammer & chisel (or core drill equipment if available) for through wall installation.
- ◆ A hacksaw (if fitting the fan through wall) to remove bracket.
- ◆ Suitable ceiling fixings (if required).

A hole cutting service is available from Xpelair. Contact Technical Services for details (UK only).

## Through loft/ceiling recess to soffit board

- 1 Create the positions for the internal grilles by marking on the ceiling and the soffit, the centre of the duct hole.
- 2 Use this centre to mark a circle to suit the wall duct (4.5"/115mm diameter).
- 3 Cut a 4.5"/115mm hole in the ceiling and soffit.
- 4 Align the grille centrally and squarely over the hole and mark the positions of the two screw holes. Drill the two holes and insert suitable ceiling fixings.
- 5 Select a suitable place for the fan to be screwed to a joist, either on top (using a plank if necessary) or on the side - but not under any roof insulation. Secure it with the fan blades towards the external grille using two screws through the fixing bracket - the arrow on the body shows direction of air flow.
- 6 Make the electrical connections as detailed in 'Electrical connections' section.
- 7 Attach the grey external grille to the outer end of the flexible duct. **G**
- 8 From the outside feed the ducting through the hole until the grille is flush with the soffit. Secure the grille to the soffit with the screws and fit screw covers.
- 9 Pull the flexible ducting gently to the discharge end of the back-draught shutter and cut it to length. Tip: keep the ducting as straight as possible as this will prevent loss in performance of the fan.
- 10 Insert the back draught shutter inside the ducting with the flaps vertical (ensuring they open when the fan is running), then connect the ducting to the outer end of the fan.
- 11 Connect the remaining piece of ducting to the internal grille, pass through the hole, screw to the ceiling and connect to the other end of the fan as described previously.

## Through the wall

- 1 Check there are no buried pipes or cables in the wall or obstructions on the outside e.g. electricity, gas, water.
- 2 Mark on the wall the centre of the duct hole. If fitting internal grille near to shower, to prevent water splashing into fan it must be fitted above the maximum height of the shower head.
- 3 Use this centre to mark a circle to suit the wall duct (4.5"/115mm diameter).

## If core drill equipment is available:

- 4a Use as directed by core drill manufacturer.
- 4b Drill a centre hole right through the wall.
- 5 Cut the hole. Do not cut right through the wall. (The recommended method is to drill a series of holes, close together, around the edge of the cutting line and remove the brick between the holes with a chisel).
- 6 From the outside, cut a hole in the outer wall, repeating the process described above.
- 7 Align the grilles centrally and squarely over their holes and mark the positions of the two screw holes. Drill the two holes and insert wall plugs

- 8 Remove the mounting bracket from the fan by sawing off with a small hacksaw.
- 9 If necessary, cut an appropriate slot in one side of the internal grille where the cable will exit.
- 10 Join together the internal grille and fan **G**.
- 11 Connect wiring as detailed in 'Electrical connections' section.
- 12 Insert the back draught shutter inside the ducting with the flaps vertical (ensuring they open when the fan is running), then connect the ducting to the outer end of the fan with a tie strap.
- 13 From the outside pull the assembly through the hole. Screw the internal grille to the wall and fit the screw covers. Cut the ducting to length, allowing enough to enable you to tie the ducting to the external grey grille. Secure the external grille as previously described.

- ◆ Ensure that the duct slopes down away from the fan to allow drainage of any incoming rain water to the outside.

## Electrical connections

For fixed wiring circuits the protective fuse for the appliance must not exceed 5A.

All wiring must be fixed securely.

Important: Switch off mains supply before making any electrical connections.

- 1 Remove the cover of the fan by springing out the spring clips.
- 2 Remove the cable clamp.
- 3 Wire the fan as shown in **D**, check fan model to diagram.
- 4 Replace the cable clamp and two screws. Ensure the cable is firmly retained by the clamp.
- 5 Adjust the timer (if fitted): isolate the fan from the mains before adjusting the timer. The timer model XIL100T has a variable overrun timer of between 2 minute and 20 minutes. Turn the adjustment screw **A** with an electrical screwdriver clockwise to reduce the time and anticlockwise to increase the time. Test the timing is satisfactory immediately after connecting the electricity supply, as access will be limited after completion of the installation.
- 6 Replace the terminal cover.
- 7 Switch off the mains electrical supply and remove fuses.
- 8 Connect the cable from the isolating switch to the electrical supply wiring.

## Using your fan

### XIL100 only

Operate the fan using the double pole isolating switch.

### XIL100T only

Operate the fan using the on/off switch. When the switch is turned off, the fan continues to operate for the adjusted time delay.

## Cleaning

The grilles can be washed with a mild household cleaner.

